impression that the veterinary surgeon is entirely to blame for the unsatisfactorily large amounts of antibiotics in milk leaving dairy farms, may I be permitted to add a small rider?

The veterinary surgeon all too often arrives in the cowshed to find that intramammary antibiotics have already been obtained by the farmer, and may have already been used. Furthermore, the practitioner may not be informed of such treatment. The veterinary profession is seriously concerned about the dangers of such circumstances, and the *Veterinary Record* of the same date as your own article devotes four pages to the subject. The law provides for supervision of distribution of antibiotics to farmers, but in the farmer's and everybody's interests more effective control must be implemented.—I am, etc.,

Department of Veterinary Hygiene and Preventive Medicine, Royal (Dick) School of Veterinary Studies, University of Edinburgh. PATRICK BARDEN.

SIR,—The leading article "Antibiotics in Milk" (June 8, p. 1491) prompts me to comment since mention is made of an isoxazolyl penicillin used for the treatment of bovine mastitis. This semi-synthetic penicillin, cloxacillin, was discovered in our research laboratories and is marketed as "orbenin."

It is agreed that a simple routine test for the presence of cloxacillin in milk is not available. With refined techniques of assay we have been able to determine levels of cloxacillin in milk, although these techniques would not normally be employed in a routine test. With a knowledge of the dangers of the presence of antibiotics in milk for human consumption, the base for orbenin intramammary suspension was specially formulated to ensure that milk is free of antibiotic for 36 hours after treatment. We have regularly informed veterinary surgeons that milk obtained from cows treated with orbenin will be free 36 hours after treatment. This is well within the limits recommended by the recent report.[1]

Since the report was published we have prepared warning slips stating that milk should be withheld for 36 hours after the last treatment with orbenin, and these have been inserted into all packs leaving the factory. We have advised all veterinary surgeons of this warning and sought their co-operation in publicizing this when prescribing the product for use on the farm.—I am, etc.,

Brentford, Middlesex. G. J. WILKINS, Managing Director, Beecham Research Laboratories Ltd.

REFERENCE

[1] *Antibiotics in Milk in Great Britain*, 1963. H.M.S.O., London.

Trachoma in Britain

SIR,—I have noted the interesting comments of Mr. F. C. Rodger (May 25, p. 1412) concerning the reintroduction into Britain of active trachoma by Commonwealth immigrants. I fully concur with his view that this is a serious threat to the ocular health of people in the United Kingdom. In my position as ophthalmologist to one of the large dock hospitals in the East End of London I have over the past few years seen quite a number of cases of highly active trachoma, particularly in Indian and Pakistani immigrants. In some instances whole families have been infected. The children attend local schools and infection of their schoolmates must always be a serious hazard. Mr. Rodger suggests that trachoma should be made a notifiable disease, and with this view I feel that every practising ophthalmologist would agree.

Some time back I had a case of an elderly Indian woman who had been admitted into this country to reside with her children who had been established here for a number of years. She was quite blind from advanced neglected glaucoma and presumably could become a substantial charge on the local rates. It always seems a pity that a thorough medical examination is not required of all immigrants to this country. We could at least ensure that adequate treatment could be offered to them if admitted, and without avoidable delay.—I am, etc.,

London W.1. LIONEL M. GREEN.

*** A leading article on this subject appears at p. 1626. —ED., *B.M.J.*

Married Quarters in Hospital

SIR,—Pressure for more married quarters in hospitals is misconceived. The problem is really the inability of junior doctors to afford an economic rent, and the proposed solution of a concealed subsidy side-steps what would be the equitable solution—namely, to pay a living wage.

I am sure that many doctors would find it distasteful to live with their families on the premises where they work. Many would resent this communal form of life, and loathe the change of home every time they change their jobs. Furthermore, when your home is tied to your job you lose some of your freedom of action and hospital boards will be even less inclined to grant reasonable working hours.—I am, etc.,

London N.W.6. MICHAEL LESER.

SIR,—The subject of married quarters in hospitals has been raised in your columns and at the same time H.M. Government announced a scheme under which £100m. will be made available for the building of new homes.

I would like to make the following suggestion as a constructive contribution to the solution of a difficult problem. Could not the Ministry of Health and the B.M.A. form a housing association in order to build flats and small houses which could then be let to members of the hospital staff at cost? Alternatively, a number of housing associations might be formed, sponsored in each case by the hospital management committee or board of governors on the one hand and by the local B.M.A. branch, the medical committee, or some members of the consultant staff on the other. Such an arrangement need cost nothing to the N.H.S. and the B.M.A. except the time of some administrators and perhaps of the hospital architect, and seems to me to bring the benefits of Sir Keith Joseph's fund to one of the groups of people which it is intended to help—namely, young skilled people with little capital, but whose careers demand mobility of labour, not only for their own good but also for the nation's.

If any senior member of the profession or of the Health Service's administrative side will take this suggestion and make it fact, I can assure him of the gratitude of hundreds, if not thousands, of doctors my age to say nothing of generations to come. Quite apart from that, I think he would find the improvement of the

morale of junior and middle-grade staff a sufficient reward in itself.—I am, etc.,

Department of Anatomy, University of Cambridge. J. S. ELKINGTON.

SIR,—My original letter under this heading to the *Oxford Medical School Gazette*[1] has achieved a wider public than I had expected but not than the subject deserves. I would refer interested readers to the original rather than to the letters of those who quote others who purport to quote me. Meanwhile, perhaps you will allow me briefly to state my position.

There are two aspects of this matter—duty to one's patients and education of oneself. Both are dependent upon discipline. This last is unfashionable and in the discard, and nowhere more noticeably so than in the ancient universities. Duty to one's patients turns upon the concept that as a resident one is available to them at all times at a minute's notice. It may be argued that this can be achieved if one lives in suitably placed married quarters in hospital. I doubt, however, if engrossment with purely domestic personal matters can always be laid aside as briskly as when one lives bachelor-style in the mess.

Of far greater importance to my mind is the educational value of living with the job, even when not actively seeing one's own patients. Being around in the mess for the casual discussion of cases and for consultation at resident level—where, for example, a colleague is uncertain what he should do with a patient sent up to the casualty department—these are the stuff whereof the training of a good doctor is made. One cannot receive this sort of education if one is in the married quarters feeding the baby or washing the nappies.

It is easy for an older person to earn the reputation of being *laudator temporis acti*, or even a curmudgeon, but it seems to one such that medicine is coming to be regarded more and more as "a job like any other," and less and less as a vocation. The economic factor is quoted by some of your younger correspondents. It is quite true that they have never had it so good. But to some of us this does not seem an adequate reason for prematurely assuming marital responsibilities when these must be shared with a job which is quite literally full-time. Rather, it might be thought that one's resident years could be the time when one could save a little capital against the increased cost of family life, or that of higher examinations.

A sense of personal discipline, a feeling of independence which this engenders, and a realization that there are limits to the taxpayer's ability to make life cushy for young doctors may be unfashionable, but they are still reasonable virtues. If people wish to marry young they should not aim to be doctors; they will neglect one or other assignment. I can quote several cases where it was, in fact, the marriage which went to the wall.—I am, etc.,

Oxford. RONALD MACBETH.

REFERENCE

[1] Macbeth, R. G., *Oxford med. Sch. Gaz.*, 1962, **14**, 175.

*** An article on married quarters appears at p. 1664. —ED., *B.M.J.*

Halothane Hazard

SIR,—I read with interest the description by Mr. G. Chamberlain of a further case of liver damage following halothane anaesthesia (June 8, p. 1524), and also your editorial comment in the issue of June 8, p. 1494.

I have now traced in the literature 24 cases of liver damage following halothane administration, with 13 fatalities. In no case is it possible directly to incriminate halothane as the cause, but it must, as you say, now be under a cloud of suspicion as being at least a contributory factor. This drug, almost universally used, is of such real value in anaesthetic practice that the doubts surrounding it must be removed as quickly as possible.

I am at present, in Aberdeen, engaged in a controlled clinical trial to assess among other things the relative hepatotoxic effects of chloroform and halothane in a quantitative fashion. While the trial was not designed primarily to investigate the hepatotoxicity of halothane, it will throw much light on the subject. In view of the importance of clarifying the situation we have undertaken a further, and more extensive and more sensitive, controlled trial, aimed solely at the evaluation of halothane's possible hepatotoxic effects. We trust that the publication of these and perhaps other workers' studies under controlled clinical conditions will resolve the doubts surrounding what is otherwise a most useful anaesthetic agent.—I am, etc.,

Department of Anaesthetics, Royal Infirmary, Aberdeen. D. DRUMMOND HART.

Dangers of Lignocaine

SIR,—I wish to endorse the remarks of Dr. Janet L. Elder and Dr. William G. Smith (May 25, p. 1416) regarding the toxicity of lignocaine. I have been using 2% lignocaine for minor operations in the casualty department for some time without mishap. On the afternoon of May 30, 1963, I attempted the manipulation of a classical Colles's fracture, the patient being an 82-year-old female with a blood-pressure of 210/110 mm. Hg.

She had a systolic murmur at the cardiac apex and scattered rales and rhonchi about the chest. Her central nervous system showed no abnormality. I decided that manipulation under local anaesthetic was suitable. I anaesthetized the skin over the radial and ulnar aspects of the wrist with 1 ml. of 2% lignocaine each side under strict asepsis. After 10 minutes I introduced 9 ml. into the radial fracture site and 7 ml. into the ulnar site. After a further 20 minutes I manipulated the fracture painlessly and successfully. A plaster-of-Paris was applied. The patient suddenly began to behave strangely. She became confused and developed a transient left facial weakness, with twitching of the legs and clonic spasm of the right arm. Her blood-pressure had fallen to 140/100 mm. Hg. She became shocked, pale, almost comatose, and in a further 10 minutes her blood-pressure fell to 120/40. Her pulse was slowed to 60 per minute with occasional dropped beats. She did not improve when the table was tilted to lower the head. I administered oxygen by face mask and an intravenous injection of 12 mg. of methylamphetamine. This was injected slowly over two minutes. There was a dramatic improvement in her condition. She was admitted to a ward immediately, where her blood-pressure was found to have returned to 200/120 mm. Hg, her pulse being 84 per minute. I did not give barbiturates since she had had a "tablet" from her doctor in the morning for pain. During the night she remained slightly confused but remembered all incidents well. She complained of swelling of her gums. For two further days she progressed well and her toxic symptoms resolved. She was then referred to the physicians for treatment of her hypertension.

I was under the impression that the maximum dose of lignocaine was 500 mg. (25 ml. of 2% solution).[1] My